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EXAMINER

SHAAWAT, MUSSA

ART UNIT PAPER NUMBER

2128

DATE MAILED: 12/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/773,560

Applicant(s)

HERMAN, PETER Q.

Examiner

Mussa A Shaawat

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 20 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. This action has been examined.
2. Claims 1-22 have been examined.
- 3.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 3, 4, 13, 17, and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Roger Danby et al (US 5,551,011), herein referred to as Danby.
6. As per claim 1 Danby teaches user controlled process parameters (column 4, lines 8-10; column 5, lines 1-5; figure 2A, item 22), a set of databases comprising a formal model of process variables (column 4, lines 11-13 and lines 15-16; column 5, lines 1-5; figure 1, item 18; also claim 16), process variable values (column 4, lines 27-31 and lines 44-45), interactions between process variables (column 4, lines 51-61) effects of the interactions on printing process output (column 7, lines 27-34; figure 2A, item 28), a dynamic model of the printing process (Abstract; column 2, lines 23-27 and lines 64-67; column 3, lines 1-5); user interface would be equivalent to interactive of Danby (column 2, line 49).

7. As per claim 3 Danby teaches a copy desk for reproducing the printing process output (column 7, lines 27-57; figure 1, item 17).

8. As per claim 4, Danby discloses software routines for performing image manipulations in order to produce printed effects on the process output, including changes in size of dots, dot density, modifications to a substrate surface (column 7, lines 27-57; column 8, lines 2-18).

9. As per claim 13, Danby teaches user controlled process parameters (column 4, lines 8-10; column 5, lines 1-5; figure 2A, item 22), creating a database containing a formal model (column 4, lines 11-13 and lines 15-16; column 5, lines 1-5 and also claim 16), providing a computerized workstation for accessing the database (column 3, lines 49-53; figure 1, item 12), accepting input from a user by way of a user interface, and displaying data related to process simulation (column 3, lines 63-67; figure 1, items 2 and 12; column 4 lines 1-5); processing data entered on the workstation to generate simulation data (column 3, lines 63-67; figure 1, items 2 and 12; column 4 lines 1-5); and displaying simulation data (column 3, lines 63-67; figure 1, items 2 and 12; column 4 lines 1-5; figure 1, item 16).

10. As per claim 17, Danby discloses image manipulation screens, dot size, density, and substrate surface (column 7, lines 27-57; column 8, lines 2-18).

11. As per claim 22, Danby teaches a database for storing parameters relating to printing operations (column 4 lines 8-10; column 5 lines 1-5; figure 2A, item 22), a formal model for relating input data to the database (column 4, lines 11-13 and lines 15-16; column 5, lines 1-5 and also claims 5 and 16), a user input for interactively eliciting input data from a user (column 2, line 49; column 3, lines 63-67; figure 1, items 2 and 12; column 4 lines 1-5); a simulating system for producing simulated printing output data (column 3, lines 63-67; figure 1, items 2 and

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12; column 4 lines 1-5); display for presenting the output data (column 3, lines 63-67; figure 1, items 2 and 12; column 4 lines 1-5; figure 1, item 16).

***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 2, 6, 8, 12, 14-15 16, 18, and 19 are rejected under 35 U.S.C. 103(a) as being obvious over Roger Danby et al (US 5,551,011), herein referred to as Danby.

14. As per claim 2, Danby discloses the simulation of a printing process (abstract; column 2, lines 23-27). Danby does not expressly disclose simulation of a pressroom and control systems in the pressroom. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to simulate a pressroom and associated control system for a better, efficient, and realistic simulation printing process.

15. As per claims 6 and 19, Official notice is taken that it would have been well known in the art that simulations were used to simulate different processes for a cost effective production. It is also used for training purposes to increase the operator know how and hence operator efficiency, reducing human error, and thus reducing the down time of the process line and the production.

16. As per claim 8, Official notice is taken that it would have been well known in the art that for any type of training one needs to work with sets of questions in order to get more familiar and acquainted with the process to increase the know-how and hence efficiency.

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17. As per claim 12, Official notice is taken that it would have been well known in the art that for any process the user needs to verify the selection of the press and associated input process parameters in order to get better, efficient, and realistic simulation.

18. As per claim 14, Danby discloses displaying the results on a monitor after the parameters are inputted (column 3, lines 62-67; column 4, lines 1-4). Danby does not expressly disclose storing these results and creating files. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to store these results and create data files for later use.

19. As per claim 15, Danby discloses use of a modem for transmitting results to another database (column 3, lines 55-59). Danby does not expressly disclose the multimedia links to data outside. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to make use of the modem for outside data.

20. As per claim 16, Danby discloses the simulation of a printing process (abstract; column 2, lines 23-27). Danby does not expressly disclose simulation of a pressroom and control systems in the pressroom. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to simulate a pressroom and associated control system for a better, efficient, and realistic simulation printing process.

21. As per claim 18, Official notice is taken that it would have been well known in the art that for any printing process densitometer is used to check the density of the printed product, magnifier is used to closely check the quality of the printed product, and the spectrophotometer is used to check the color balance of the printed product.

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22. Claim 5 is rejected under 35 U.S.C. 103(a) as being obvious over Roger Danby et al (US 5,551,011), herein referred to as Danby in view of Oded Zingher (US 4,639,881), herein referred to as Zingher.

23. As per claim 5, Danby does not expressly disclose the printer diagnostic tools. Zingher teaches about the densitometer (column 4, lines 9-12; column 12, lines 27-34; figure 1, items 12 and K; figure 4). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teachings of Danby with the teachings of Zingher in order to measure the ink density based on the predetermined values and machine conditions.

24. Claims 7 and 20 are rejected under 35 U.S.C. 103(a) as being obvious over Roger Danby et al (US 5,551,011), herein referred to as Danby in view of Oded Zingher (US 4,639,881), herein referred to as Zingher and in further view of Norman E. Karel (US 5,733,634), herein referred to as Karel.

25. As per claims 7 and 20, Danby fails to teach the production costs. Karel teaches the production costs (Abstract; column 1, lines 47-59). It would have been obvious to one of ordinary skill in the art at the time of invention was made to modify the teachings of Danby with Karel to come up with a simulator that gives the user a window for economic considerations for cost effective product.

26. Claims 9, 10, and 21 are rejected under 35 U.S.C. 103(a) as being obvious over Roger Danby et al (US 5,551,011), herein referred to as Danby in view of Oded Zingher (US 4,639,881), herein referred to as Zingher and in further view of Norman E. Karel (US 5,733,634), herein referred to as Karel and in further view of Koichi Horiuchi et al (US 5,434,961), herein referred to as Horiuchi.

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27. As per claim 9, 10, and 21 Danby fails to teach the copy generator module and how to analyze an image and pre-calculate process faults. Horiuchi teaches about the process of layout and typesetting for a printing process (Abstract; column 1, lines 41-47, lines 50-63; column 6, lines 58-68; figures 27(B) and (C)). It would have been obvious to one of ordinary skill in the art at the time of invention was made to modify the teachings of Danby with Horiuchi in order to simulate the real life images for more realistic experience.

28. Claim 11 is rejected under 35 U.S.C. 103(a) as being obvious over Roger Danby et al (US 5,551,011), herein referred to as Danby in view of Oded Zingher (US 4,639,881), herein referred to as Zingher and in further view of Norman E. Karel (US 5,733,634), herein referred to as Karel and in further view of Koichi Horiuchi et al (US 5,434,961), herein referred to as Horiuchi and in further view of David G. Pung et al (US 5,027,293), herein referred to as Pung.

29. As per claim 11, Danby fails to teach the diagnostic help system module for presenting the databases to help users troubleshoot print problems. Pung teaches the diagnostic system for production line and plurality of process machines (Abstract; column 19, lines 39-61; claims 8 and 11). It would have been obvious to one of ordinary skill in the art at the time of invention was made to modify the teachings of Danby with the teachings of Pung to come up with a efficient and realistic simulation for a printing process.

30. Applicant's arguments filed have been fully considered but they are not persuasive.



In the remarks, the applicant argues in substance that; A) Danby does not disclose a dynamic model of the print process, B) Danby does not disclose user control or process data related to print process output, C) Danby does not disclose a simulator to simulate multicolor printing and rolls of paper.

In response to A) Danby discloses a simulation of the formation of a sheet of paper and the appearance of print thereon, a computerized system adaptive to receive input parameters related to a type of headbox stock desired, the fabric upon which the paper is to be formed, along with the paper machine and printing process desired, so as to provide a simulation of the formation of a sheet of paper along with the print quality provided thereby (see col.2 lines 47-54). There is no limitation on which part of the process is modeled and therefore the simulation of print quality and formation of sheet of paper meets the scope of the claimed limitation a “dynamic model of printing process”.

In response to B) Danby discloses a program that requires the user to input the parameters needed for simulation, from the IBM-PC computer 2 and in some cases from the work station 12. Once such parameters have been inputted and the program is running, the computer 2 will generate a report, enabling the display monitor 16 to provide the user with an image of paper sheet formation, along with many of the characteristics of the final sheet, including the appearance of print thereon (see col.3 lines 63-67, and col.4 lines 1-3). There is no limitation on the kind or type of user control, therefore; parameters entered by the user needed for simulation meets the scope of the claimed limitation “user control related to printing process output”.

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Applicant argues Danby does not disclose a simulator to simulate multicolor printing and rolls of paper, these limitations are not found in the claims. Claimed subject matter not the specification is the measure of the invention. Disclosure contained in the specification cannot be read into the claims for the purpose of avoiding prior art. In re Sporck, 55 CCPA 743, 386 F.2d 924, 155 USPQ 687 (1986); In re Self, 213 USPQ 1, 5 (CCPA 1982); In re Priest, 199 USPQ 11, 15 (CCPA 1987).

31. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mussa A Shaawat whose telephone number is (571) 272-3785. The examiner can normally be reached on Monday-Friday (8:30am to 5:00pm).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jean R Homere can be reached on (571) 272-3780. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mussa Shaawat  
Patent Examiner  
December 13, 2004

  
JEAN R. HOMERE  
PRIMARY EXAMINER